

CITY OF FAIRFIELD

RESOLUTION NO. 2016 - 290

**RESOLUTION OF THE CITY COUNCIL OF THE CITY OF FAIRFIELD AUTHORIZING
THE CITY MANAGER TO EXECUTE A DESIGN SERVICES AGREEMENT
BETWEEN THE CITY OF FAIRFIELD AND NV5, INC. FOR THE NORTH BAY
REGIONAL WATER TREATMENT PLANT SITE PIPING, VALVE AND VAULT
IMPROVEMENTS PROJECT**

WHEREAS, the City's North Bay Regional Water Treatment Plant (NBR) has some piping and valves that are reaching the end of their useful life and need to be replaced; and

WHEREAS, the project requires design development and bid document preparation, bidding assistance and limited engineering services during construction for replacement of a portion of the piping, valves and vaults located at NBR; and

WHEREAS, the City solicited a proposal for design services to replace the NBR piping, valves and vaults in question, and NV5, Inc. was deemed qualified to perform quality design services at a fair and reasonable price.

**NOW THEREFORE, THE COUNCIL OF THE CITY OF FAIRFIELD HEREBY
RESOLVES:**

Section 1. The City Manager is hereby authorized and directed to execute on behalf of the City of Fairfield that certain agreement for design services with NV5, Inc. for the North Bay Regional Water Treatment Plant Site Piping, Valve and Vault Improvements Project, for an amount not to exceed one-hundred twenty-seven thousand, seven-hundred eighty-three dollars and zero cents (\$127,783.00).

Section 2. The Director of Public Works is hereby authorized implement the above mentioned Agreement.

PASSED AND ADOPTED this 20th day of December, 2016, by the following vote:

AYES: COUNCILMEMBERS: PRICE/TIMM/BERTANI/MOY/VACCARO

NOES: COUNCILMEMBERS: NONE

ABSENT: COUNCILMEMBERS: NONE

ABSTAIN: COUNCILMEMBERS: NONE

Sam T. Price
MAYOR

ATTEST:
Karen L. Rees
CITY CLERK
pw

CONSULTANT SERVICES AGREEMENT

THIS AGREEMENT is made at Fairfield, California, as of January 4, 2016, by and between the City of Fairfield, a municipal corporation (the "CITY") and NV5, Inc. ("CONSULTANT"), who agree as follows:

1) SERVICES. Subject to the terms and conditions set forth in this Agreement, CONSULTANT shall provide to the CITY the services described in Exhibit "A," which consists of the proposal submitted by CONSULTANT. CONSULTANT shall provide said services at the time, place, and in the manner specified in Exhibit "A."

2) PAYMENT. CITY shall pay CONSULTANT for services rendered pursuant to this Agreement at the times and in the manner set forth in Exhibit "B." The payments specified in Exhibit "B" shall be the only payments to be made to CONSULTANT for services rendered pursuant to this Agreement. CONSULTANT shall submit all billings for said services to the CITY in the manner specified in Exhibit "B."

3) FACILITIES AND EQUIPMENT. CONSULTANT shall, at its sole cost and expense, furnish all facilities and equipment which may be required for furnishing services pursuant to this Agreement.

4) GENERAL PROVISIONS. The general provisions set forth in Exhibit "C" are part of this Agreement. In the event of any inconsistency between said general provisions and any other terms or conditions of this Agreement, the provisions set forth in Exhibit "C" shall control.

5) INSURANCE REQUIREMENTS. The insurance requirements set forth in Exhibit "D" are part of this Agreement. In the event of any inconsistency between said general provisions and any other terms or conditions of this Agreement, the requirements set forth in Exhibit "D" shall control.

6) EXHIBITS. All exhibits referred to herein are attached hereto and are by this reference incorporated herein.

7) TERM. This agreement shall be in effect until the scope of work is completed.

EXECUTED as of the day first above-stated.

City of Fairfield, a municipal corporation

By: _____

David A. White
City Manager

CONSULTANT

By: _____

EXHIBIT "A"

SCOPE OF SERVICE

This form is to be used when you don't have a proposal letter from the contractor to use. If you have a proposal letter that you wish to use for Exhibit A — Simply type "Exhibit A" at the top of the proposal letter.

November 23 2016

Mr. Felix Riesenber, PE
City of Fairfield, Public Works Department
1000 Webster Street
Fairfield, CA 94533

Subject: **Proposal for Professional Engineering Services for the North Bay Regional Water Treatment Plant Valve Vaults Project**

Dear Felix:

We met with Brandan Hiltman, Water Treatment Manager for the North Bay Regional Water Treatment Plant (NBR Plant). He was very helpful in describing the need for the valve vaults at the existing NBR Plant for 1) the raw water isolation valves; and 2) the Fairfield/Vacaville treated water isolation valves. Each area is described below:

Raw Water Isolation Valve Vault

The existing 42-inch raw water line from the North Bay Aqueduct (NBA) connects at a tee with the 54-inch raw water line from the Putah South Canal (PSC). The combined raw water is then conveyed into the pre-zone contactor through a 72-inch raw water line. Each raw water line (42-inch NBA, 54-inch PSC) can be isolated via a buried isolation butterfly valve located approximately 5 ft from where the two raw water lines meet at the tee. The valves are critical to the continued operation of the NBR Plant as they may be used to allow for repairs or service to the upstream pipeline or valves. They are also used to isolate a source from flowing into the other if there to be a catastrophic break upstream.

The two isolation valves are buried and unfortunately they have not been exercised in 20 years. NBR Plant staff has concerns of the valves may potentially break open, closed, or partial when exercised. To repair such a failure, excavation of the buried valve is required plus potential loss of production capacity and reduced level of service. A valve vault covering both valves could be constructed to expose these valves and allow for routine maintenance along with timely repairs. With this project, it would make sense to replace the existing valves with new butterfly valves along with the appropriate manual gearbox and hand wheel.

Another improvement that is critical to this valve vault is the wash water return line relocation. According to NBR Plant staff the plant water from several processes is collected at the Wash Water Basin and pumped through a 16-inch Wash Water Return (WWR) pipe to the front of the plant. The 16-inch WWR pipe tees in at the existing 42-inch NBA raw water line approximately 30 ft before the PSC/NBA tee. If the 42-inch NBA line were to be out of service (isolated), wash water could not be used pumped. Therefore, it is essential to consider rerouting the existing 16-inch WWR line to the 72-inch combined pipeline leading into the Pre-Ozone basin. If possible, it would be preferred to have the new 16-inch WWR line and a new isolation valve located in the Raw Water Isolation Valve Vault.

Water collected inside the proposed valve vault will be conveyed to a sump equipped with a sump pump and discharged to the storm drainage system, taking into consideration the NPDES (National Pollutant Discharge Elimination System) permit. Electrical design is limited to lighting, receptacles, and alarms from the new valve vaults to existing electrical infrastructure.

Fairfield/Vacaville Treated Water Valve Vaults

Treated water from the NBR Plant is conveyed to both Fairfield and Vacaville via separate treated water distribution pipelines. The 42-inch Fairfield treated water line includes a meter vault. The 30-inch Vacaville

treated water line also includes a meter vault. Downstream from each meter vault there is an isolation valve for each pipeline. These isolation valves prevent water from feeding back from the distribution system while maintenance is being performed on either the Vacaville or Fairfield header. The 42-inch Fairfield and 30-inch Vacaville isolation valves are buried and located approximately 10 to 15 ft downstream from the meter vaults. Valve vaults at each of these isolation valves is recommended to expose these valves and allow for routine maintenance and timely repairs. With the construction of the valve vault, it is recommended to install two new isolation valves with the appropriate manual gearbox and hand wheel.

Water collected inside the proposed valve vault will be conveyed to a sump equipped with a sump pump and discharged to the storm drainage system or may be connected to sump pump discharge from each existing meter valve vault, taking into consideration the NPDES (National Pollutant Discharge Elimination System) permit. Electrical design is limited to lighting, receptacles, and alarms from the new valve vaults to existing electrical infrastructure.

Exhibit 1 is a schematic representation of the proposed improvements for this project.

We are excited to provide the City with assistance in developing the contract documents, bid support services, and engineering services during construction (ESDC) for this project according to the following scope of services.

SCOPE OF SERVICES

The following tasks are included in the Scope of Services for the project:

Task 1 – Project Management

Project management includes supervision and scheduling of project staff, review of work prepared by staff, project coordination, liaison with the client, monitoring of budget, and corresponding with City staff and other interested parties. Quality assurance and quality control will be accomplished through peer review by senior design staff.

Meetings are planned at the following stages:

- 60% Design Submittal Review Meeting
- 90% Design Submittal Review Meeting

Task 2 – Topographic Survey

NV5 will conduct a topographic survey of the two project areas (raw water valves and treated water valves) to show all above-ground locations and invert depths of utilities and improvements as well as elevations contours at one-foot intervals. The limits of the topographic mapping are depicted in Exhibit 1. The topographic mapping will be provided at a scale of 1" = 20' to 1" = 40' and meet the accuracy requirements of the National Map Accuracy Standards. The topographic base map will be used for the preparation of construction documents (plans) for the project.

Task 3 – Background Information

Available as-built information for the existing utilities near the project areas (raw water valves and treated water valves) will be made available from the NBR Plant staff. NV5 will review the information and identify if specific utilities will need potholing or identified at the site. We have included as part of this task a site visit to take measurements and/or confirm existing features prior to initiating the design of the valve vaults.

NV5

OFFICE NATIONAL

CONSTRUCTION QUALITY ASSURANCE INFRASTRUCTURE ENERGY PROGRAM MANAGEMENT ENVIRONMENTAL

Task 4 – Geotechnical Investigation

We have teamed with Crawford & Associates (C&A) to perform the necessary fieldwork, laboratory testing, and analysis to provide geotechnical services for this project. To assess the subsurface soil and groundwater conditions for the proposed valve vaults, C&A will drill log, and sample a total of three (3) borings to depths ranging from 30 to 40 feet below existing grade. It is expected that the boring can be drilled during dry field conditions.

C&A will sample and log the borings at 5-ft intervals and deliver the samples to an independent laboratory for testing. The drilling contractor will advance the borings with a rubber-tired, truck or track-mounted drill rig using 6 to 8-inch diameter hollow and/or solid stem augers and/or 3 to 4-inch rotary equipment. Standard Penetration Testing (SPT) and California Modified sampling will be performed within the borings to obtain samples and blow count information. The borings will be backfilled according to the boring permit and the auger/drill cuttings will be spread out onsite.

C&A will prepare a geotechnical report containing the following:

- Subsurface soil and groundwater conditions
- Laboratory results
- Corrosion results
- CBC Seismic Design parameters
- Liquefaction potential
- Geotechnical recommendations for use in vault design including type, elevation, and bearing capacity of foundation elements, lateral earth pressures and sliding resistance
- Geotechnical recommendations for grading including fill/backfill placement and compaction
- Asphalt concrete and aggregate base pavement sections based on the TI provided by the City
- Construction consideration including soil excavatability, OSHA soil types and groundwater

We will submit a Draft Geotechnical Report to the City for review and comment. Upon receipt of comments, we will prepare and submit the Final Geotechnical Report.

Task 5 – Contract Documents

Contract documents will include plans, technical specifications, and an engineer's opinion of probable construction cost (PS&E). We propose to prepare the Contract Documents and submit progress submittals at the 60%, 90%, and 100% design levels according to the following subtasks:

Task 5.1 – 60% Design Submittal

NV5 will provide drawings, specifications, and a construction cost estimate with the 60% design submittal. Construction plans will be prepared in conformance with the City of Fairfield Standard Specifications, current edition. The construction plans for this project will include the following preliminary list of drawings:

- General
 - Title Sheet
 - Abbreviations, Symbols, and Legends
- Civil
 - Existing Site Plan
 - Proposed Site Plan and Piping Plan
 - Details – 1

NV5

OFFICE: NATIONWIDE

CONSTRUCTION QUALITY ASSURANCE INFRASTRUCTURE DESIGN PROGRAM MANAGEMENT ENVIRONMENTAL

- Details – 2
- Structural
 - General Structural Notes
 - Standard Structural Details
 - FF Treated Water Isolation Valve Vault - Plan
 - FF Treated Water Isolation Valve Vault - Section
 - FF Treated Water Isolation Valve Vault - Details
 - VV Treated Water Isolation Valve Vault - Plan
 - VV Treated Water Isolation Valve Vault - Section
 - VV Treated Water Isolation Valve Vault - Details
 - Raw Water Isolation Valve Vault - Structural - Plan
 - Raw Water Isolation Valve Vault - Structural - Sections
 - Raw Water Isolation Valve Vault - Structural – Details
- Electrical
 - Symbols and Abbreviations
 - Miscellaneous Systems P&ID
 - One-Line Diagram
 - Site Plan and Conduit Schedule
 - Raw Water Valve Vault Lighting and Receptacle Plan
 - FF Treated Water Isolation Valve Vault Lighting and Receptacle Plan
 - VV Treated Water Isolation Valve Vault Lighting and Receptacle Plan

Technical specifications for the site improvements, structural improvements, and electrical improvements will be prepared in CSI format for incorporation into the standard City bid package. The City will provide a copy of the standard front-end specifications for NV5 to review and revise, as necessary with project specific information. NV5 will refer to City Standard Details (yellow section) and incorporate Special Provisions (green section) as appropriate for this project.

An estimate of the probable construction cost will be provided. The level of detail will be commensurate with the level of completion of the project.

Submittal of the 60% Design documents will be in electronic format and include reduced-size (11"x17") plan sheets, specifications, and cost estimate.

After the City has completed reviewing the 60% Design submittal, NV5 will coordinate and attend a 60% review comments meeting to go over the comments and receive specific guidance on design features requiring City input.

Task 5.2 – 90% Design Submittal

Upon receipt of comments from the City on the 60% Design documents, NV5 will update the design and provide drawings, specifications, and a construction cost estimate to the 90% design level. Responses to comments from the 60% design submittal will be made in a standard comment/response log form.

Submittal of the 90% Design documents will be in electronic format and include reduced-size (11"x17") plan sheets, specifications, cost estimate, and the comments/response log form.

After the City has completed reviewing the 90% Design submittal, NV5 will coordinate and attend a 90% review comments meeting to go over the comments and receive specific guidance on design features requiring City input.

NV5

CONSULTANTS

CONSTRUCTION QUALITY ASSURANCE INFRASTRUCTURE ENERGY PROGRAM MANAGEMENT ENVIRONMENTAL

Task 5.3 – 100% Design Submittal

Upon receipt of comments from the City on the 90% Design documents, NV5 will update the design and provide drawings, specifications, a construction cost estimate, and a structural calculations package for the 100% design level. Responses to comments from the 90% design submittal will be made in a standard comment/response log form.

Submittal of the 100% Design documents will be in electronic format and include reduced-size (11"x17") plan sheets, specifications, cost estimate, and the comments/response log form.

We do not anticipate a face to face meeting with the City to receive comments on the 100% Design Submittal. Instead, the City will deliver any comments on the 100% Design documents in electronic format.

Task 5.4 – Final Design Submittal

We will incorporate City's comments on the 100% design submittal and submit a final, signed, construction-ready Contract Documents package that includes full-size (24"x36") plan sheets, specifications, and cost estimate.

Task 6 – Deliverables

Deliverables include the following:

- Draft Geotechnical Report: one (1) digital copy
- Final Geotechnical Report: one (1) digital copy
- 60% Design Submittal: one (1) digital copy of the plans and specifications, one (1) digital copy of the construction cost estimate, and one (1) digital copy of the comments/response log form.
- 90% Design Submittal: one (1) digital copy of the plans and specifications, one (1) digital copy of the construction cost estimate, and one (1) digital copy of the comments/response log form.
- 100% Design Submittal: one (1) digital copy of the plans and specifications, one (1) digital copy of the construction cost estimate, and one (1) digital copy of the structural calculation package.
- Final Bid Documents (Plans and Specifications): One (1) copy-ready hard copy of full-size plans (in bond paper) and one (1) consolidated electronic file (PDF format) of the Contract Documents and Technical Specifications.

Task 7 – Bid Support Services

The City will make the plans available to the prospective bidders. As part of the Bid Support Services we will assist the City with the following tasks:

Task 7.1 – Attend Pre-Bid Meeting

The City will organize and coordinate the mandatory pre-bid meeting date and time. Our Project Manager and Project Engineer will attend the mandatory pre-bid meeting and be available to respond any questions regarding the design intent of the Bid Documents.

Task 7.2 – Assistance with Addenda

Questions posed during the bid period regarding the design intent of the Bid Documents may require additional detail and clarification. The additional detail and clarifications are generally presented to prospective bidders in the form of Bid Addenda. We have budgeted a total of 12 professional labor hours (4 for the Project Manager and 8 for the Project Engineer) to assist the City in the preparation of 2 addenda. We

NV5

UNITED STATES NATIONAL

CONSTRUCTION OF ABBOTT RESURFACING, WATER MAINS, SEWER, AND STORMWATER MANAGEMENT IMPROVEMENTS

also have included in our labor estimate a total of 8 hours for drafting revisions to plans or preparing additional details.

Task 7.3 – Review Bid Results

The City will receive all the bids from prospective bidders and prepare a bid summary. We will review the bid summary prepared by the City and provide the City with comments and input on the apparent low bidder before making a selection.

Task 8 - Engineering Services During Construction (ESDC)

We propose to assist the City during construction of this project according to the following tasks:

Task 8.1 – Attend Pre-Construction Meeting

The City will organize and coordinate the mandatory pre-construction meeting date and time with the selected contractor. Our Project Manager and Project Engineer will attend the mandatory pre-construction meeting to outline protocols that will ensure the project is completed according to the Bid Documents.

Task 8.2 – Review Contractor Submittals

We anticipate many contractor submittals will be reviewed by the City and we will only review a total of ten (10) submittals. For this task we have budgeted labor hours for our Project Engineer and Structural Engineer as well as Electrical Engineer to respond to the submittals sent to us for review and comment. We will review the submittals sent to us by the City and respond according to the format and protocols agreed during the pre-construction meeting. EETS, Inc. will review contractor submittals for the following items:

- General electrical materials
- Lighting

Task 8.3 – Responses to Contractor Generated RFIs

The Contractor generated RFIs on this project will be received by the City and those that require the input from NV5 will be sent electronically for immediate response. We anticipate the City will forward to NV5 a total of 5 RFIs. We have budgeted a total of 16 professional labor hours (Project Manager - 4 and Project Engineer - 12) to prepare responses to the RFIs requiring input from NV5. We also have included in our labor estimate a total of 8 hours for drafting additional sketches or additional details. EETS will also respond to a total of 2 RFIs relating to electrical items.

Task 8.4 – Assistance with Change Orders

If unanticipated conditions are encountered in the field requiring revisions to the design or other revisions to the plans are necessary, a Construction Change Order may be required. We will assist the City in preparing one construction change orders for this project. We have budgeted 12 professional labor hours (Project Manager - 4 and Project Engineer – 8) to prepare construction change orders. We also have included in our labor estimate a total of 8 hours for drafting revisions to plans and/or additional details.

Task 8.5 – Site Visits

In the event our presence is required at the construction site, we have budgeted labor hours to attend two site visits by our Project Manager, Project Engineer, and/or Structures Engineer at the request of the City's construction inspector. In addition, EETS has included one site visit to oversee the installation of electrical work (underground conduit, equipment anchorage, and wire installations and termination).

NV5

OFFICES NATIONWIDE

CONSTRUCTION QUALITY ASSURANCE INFRASTRUCTURE ENERGY PROGRAM MANAGEMENT ENVIRONMENTAL

Task 8.6 – Record Drawings

The Contractor is responsible for maintaining an updated set of redlined construction drawings depicting actual “as-constructed” conditions. NV5 is not responsible for observing and documenting all changes in construction. Inaccuracies, errors, omissions, ambiguities, or conflicts in the redline construction drawings are the responsibility of the Contractor. Following completion of construction, the Contractor’s set of redlined construction drawings will be submitted to NV5. Based upon NV5’s review of the Contractor’s redlined construction drawings, NV5 will prepare “Record Drawings.” NV5’s deliverable under this task will be one set of reproducible Record Drawings in bond (half size) and an electronic version of the annotated design drawings. This task does not include verification of “as-constructed” conditions.

PROJECT PERSONNEL

Victor Alaniz will be the main contact for this project and will serve as project manager. He will be assisted by Dan Gagne as the project engineer.

SCHEDULE

Upon Notice to Proceed (NTP), we anticipate the following milestones to be met within the following schedule assuming we receive NTP by December 16, 2016:

Task	Duration	Date
• Topographic Survey	4 weeks after NTP	January 13, 2017
• Geotechnical Report	6 weeks after NTP	January 27, 2017
• Submit 60% Design Submittal	6 weeks after topo survey	February 24, 2017
• 60% Design Review Comments Mtg	2 weeks after 60% Submittal	March 10, 2017
• Submit 90% Design Submittal	3 weeks after 60% Meeting	March 31, 2017
Task	Duration	Date
• 90% Design Review Comments Mtg	2 weeks after 90% Submittal	April 14, 2017
• Submit 100% Design Submittal	2 weeks after 90% Meeting	April 28, 2017
• 100% Design Review Comments Mtg	2 weeks after 100% Submittal	May 12, 2017
• Submit Final Bid Documents	2 weeks after 100% comments	May 26, 2017

This allows this City to bid in April and construct in summer/fall of 2017.

NV5

CONSTRUCTION MANAGEMENT

CONSTRUCTION MANAGEMENT • PROJECT MANAGEMENT • PROGRAM MANAGEMENT • OPERATIONS MANAGEMENT

ESTIMATED FEE

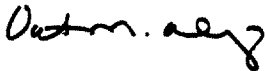
Our estimated fee for the engineering scope of services outlined above is summarized below.

Task Item	Fee Estimate
Task 1 – Project Management	\$4,860
Task 2 – Topographic Survey	\$6,564
Task 3 – Background Information	\$5,280
Task 4 – Geotechnical Investigation	\$26,828
Task 5 – Contract Documents	\$62,811
Task 6 – Deliverables	\$2,122
Task 7 – Bid Support Services	\$2,690
Task 8 – Engineering Services During Construction	<u>\$16,628</u>
Total	\$127,783

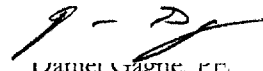
A copy of our detailed labor hour and fee estimate is provided as an attachment for your review and reference.

Please contact us at your convenience with any questions or comments.

Sincerely,
NV5, Inc.



Engineering Manager



Daniel Gagne, P.E.
Structures Engineer

P2262161922

NV5

OFFICES NATIONWIDE

CONSTRUCTION QUALITY ASSURANCE INFRASTRUCTURE ENERGY PROGRAM MANAGEMENT ENVIRONMENTAL

EXHIBIT "B"

PAYMENT

1) The total contract price for services rendered by CONSULTANT under this Agreement shall be on a time and materials basis, not-to-exceed one-hundred eight thousand four-hundred sixty-five dollars (\$108,465).

2) Payment shall be made to CONSULTANT on a time and materials basis, and CONSULTANT shall submit monthly invoices to the Assistant Public Works Director/Utilities for the same.

3) Any additional meetings or work required beyond that set forth in Exhibit "A" shall be mutually agreed to in writing by the CITY and CONSULTANT, and shall be billed on a time and materials basis.



Charge Rates Schedule
For
City of Fairfield
Engineering Services for the North Bay Regional Water Treatment
Plant Valve Vaults Project

Staff:

QA/QC Manager.....	\$205.00/hour
Project Manager	\$180.00/hour
Project Engineer.....	\$150.00/hour
Structural Engineer.....	\$150.00/hour

Supporting Staff:

Technical Services

Project Assistant.....	\$96.00/hour
------------------------	--------------

Professional

Junior Engineer	\$96.00/hour
Assistant Engineer	\$110.00/hour

Field:

Survey

Survey Manager.....	\$150.00/hour
Survey Crew – 1 Person.....	\$154.00/hour

Expenses:

Plotting and In-house Reproduction	1.00 x Cost
Other Expenses - Including Subconsultants & Purchased Services through Subcontracts ..	1.05 x Cost

Rates are effective through June 2017. If contract assignment extends beyond that date, a new rate schedule will be added to the contract. Litigation support will be billed at \$300.00 per hour. Rates based on “Prevailing Wage” (PW) for Construction Management and Surveying will be determined by Project and County per California law.

CITY OF FAIRFIELD
NORTH BAY REGION (NBR) WATER TREATMENT PLANT - VALVE VAULTS PROJECT
FEE ESTIMATE

Attachment to EXHIBIT "B"

September 30, 2016

Task	Description	NV5 Staff										Sub-Consultants			Other Costs	
		Project Manager \$180	Project Engineer \$160	Structures Engineer \$160	Survey Manager \$160	Survey Crew 1-person \$164	Staff Engineer/ Drafter \$110	Project Assistant \$96	Total NV5 Hours	Total NV5 Fee	EETS Electrical	Crawford Geotechnical	Total Subs Fee	Subs Markup 5%	Total Project Fee Estimate	
1	Project Management	Project Meetings														
		60% Design Review Comments Meeting	2	2					4	\$660			\$0	\$0	\$660	
		90% Design Review Comments Meeting	2	2					4	\$660			\$0	\$0	\$660	
		Other Design Issues Meeting	2	2					4	\$660			\$0	\$0	\$660	
		QA/QC Program	16						16	\$2,880			\$0	\$0	\$2,880	
	SUBTOTAL: Task 1 - Project Management	22	6	0	0	0	0	28	\$4,860	\$0	\$0	\$0	\$0	\$4,860		
2	Topographic Survey	Field Survey - Control														
		Topographic Base Map														
		SUBTOTAL: Task 2 - Topo Survey	16	4	0	16	16	10	0	62	\$6,564	\$0	\$0	\$0	\$0	\$6,564
3	Background Information	Review As-Built and Other Information	2	8		8		4		30	\$4,400		\$0	\$0	\$4,400	
		Site Visit	2			8		2	6	\$880		\$0	\$0	\$0	\$880	
	SUBTOTAL: Task 3 - Background Info	4	10	18	8	0	14	0	54	\$5,280	\$0	\$0	\$0	\$0	\$5,280	
4	Geotechnical Investigation	Coordination with Crawford & Associates	2		2				4	\$660			\$0	\$0	\$660	
		Geotechnical Report						2	2	\$192	\$24,739	\$24,739	\$1,237	\$26,828		
		SUBTOTAL: Task 4 - Geotechnical	4	0	4	0	0	2	2	12	\$852	\$0	\$24,739	\$24,739	\$1,237	\$26,828
5	Contract Documents	5.1 60% Design Submittal														
		Plans	2	12	24		60		98	\$12,360	\$4,000		\$4,000	\$200	\$16,560	
		Specifications	8	12	12			4	36	\$5,424	\$2,668		\$2,668	\$133	\$8,225	
		Estimate	1	4	8		4		17	\$2,420			\$0	\$0	\$2,420	
		5.2 90% Design Submittal														
		Plans	2	8	16		40		66	\$8,360	\$2,000		\$2,000	\$100	\$10,460	
		Specifications	6	8	8			2	24	\$3,672	\$1,834		\$1,834	\$92	\$5,598	
		Estimate	1		4		2		7	\$1,000			\$0	\$0	\$1,000	
		5.3 100% Design Submittal														
		Plans	2	4	10		20		36	\$4,660	\$1,000		\$1,000	\$50	\$5,710	
6	Deliverables	Specifications	2	4	4		2		12	\$1,752	\$278		\$278	\$14	\$2,044	
		Estimate	1		2				5	\$700			\$0	\$0	\$700	
		Structural Calculations Package	2		32		2		36	\$5,352			\$0	\$0	\$5,352	
		5.4 Final Design Submittal														
		Plans	2	2	2		10		16	\$2,060	\$800		\$800	\$40	\$2,900	
		Specifications	2	2	2			2	8	\$1,152	\$200		\$200	\$10	\$1,362	
		Estimate	1	1	1				3	\$480			\$0	\$0	\$480	
		SUBTOTAL: Task 5 - Bid Documents	27	52	120	0	0	128	8	337	\$49,392	\$12,760	\$0	\$12,760	\$639	\$62,811
		Draft Geotechnical Report														
		Final Geotechnical Report		1				1	2	\$246			\$0	\$0	\$246	
7	Bid Support Services	60% Design Submittal		1					2	\$246			\$0	\$0	\$246	
		90% Design Submittal		1			1		3	\$356			\$0	\$0	\$356	
		100% Design Submittal		1			1		3	\$356			\$0	\$0	\$356	
		Final Design Submittal		1			2		5	\$562			\$0	\$0	\$562	
		SUBTOTAL: Task 6 - Deliverables	12	14	53	0	0	32	7	457	\$2,122	\$0	\$0	\$0	\$0	\$2,122
		7.1 Attend Pre-Bid Meeting	1	1					2	\$330			\$0	\$0	\$330	
		7.2 Assistance with Addenda	2	6			4		12	\$1,700			\$0	\$0	\$1,700	
		7.3 Review Bid Results	2	2					4	\$660			\$0	\$0	\$660	
		SUBTOTAL: Task 7 - Bid Support Services	3	7	0	0	0	5	7	826	\$2,690	\$0	\$0	\$0	\$0	\$2,690
		Engineering Services During Construction														
8	Engineering Services During Construction	8.1 Attend Pre-Construction Meeting	2	2						\$660			\$0	\$0	\$660	
		8.2 Review Contractor Submittals	2	8	8					\$2,760	\$1,160		\$1,160	\$58	\$3,978	
		8.3 Responses to Contractor Generated RFIs	4	6	6		8			\$3,400	\$500		\$500	\$25	\$3,925	
		8.4 Assistance with Change Orders	4	8	8					\$2,800	\$0		\$0	\$0	\$2,800	
		8.5 Site Visits	4	4	4					\$1,320	\$800		\$800	\$40	\$2,160	
		8.6 Record Drawings	2	4	2				20	\$500			\$500	\$25	\$515	
	SUBTOTAL: Task 8 - ESDC	9	14	8	0	0	8	4	1312	\$13,520	\$2,960	\$0	\$2,960	\$148	\$16,628	
Total - FEE ESTIMATE		97	107	203	24	16	199	28	3088	\$85,280	\$15,740	\$24,739	\$40,479	\$2,024	\$127,783	

EXHIBIT "C"

GENERAL PROVISIONS

1) **INDEPENDENT CONSULTANT.** At all times during the term of this Agreement, CONSULTANT shall be an independent contractor and shall not be an employee of CITY. CITY shall have the right to control CONSULTANT only insofar as the results of CONSULTANT's services rendered pursuant to this Agreement; however, CITY shall not have the right to control the means by which CONSULTANT accomplishes services rendered pursuant to this Agreement.

2) **LICENSES; PERMITS; ETC.** CONSULTANT represents and warrants to CITY that CONSULTANT has all licenses, permits, qualifications, and approvals of whatsoever nature which are legally required for CONSULTANT to practice CONSULTANT's profession. CONSULTANT represents and warrants to CITY that CONSULTANT shall, at its sole cost and expense, keep in effect at all times during the term of this Agreement, any licenses, permits, and approvals which are legally required for CONSULTANT to practice his profession.

3) **TIME.** CONSULTANT shall devote such services pursuant to this Agreement as may be reasonably necessary for satisfactory performance of CONSULTANT's obligations pursuant to this Agreement. CONSULTANT shall adhere to the Schedule of Activities as described in their Executive Summary.

4) **CONSULTANT NOT AN AGENT.** Except as CITY may specify in writing, CONSULTANT shall have no authority, express or implied, to act on behalf of CITY in any capacity whatsoever as an agent. CONSULTANT shall have no authority, express or implied, pursuant to this Agreement, to bind CITY to any obligation whatsoever.

5) **ASSIGNMENT PROHIBITED.** No party to this Agreement may assign any right or obligation pursuant to this Agreement. Any attempted or purported assignment of any right or obligation pursuant to this Agreement shall be void and of no effect.

6) **PERSONNEL.** CONSULTANT shall assign only competent personnel to perform services pursuant to this Agreement. In the event that CITY, in its sole discretion, at any time during the term of this Agreement, desires the removal of any person or persons assigned by CONSULTANT to perform services pursuant to this Agreement, CONSULTANT shall remove any such person immediately upon receiving notice from CITY of the desire of CITY for the removal of such person or persons.

7) **STANDARD OF PERFORMANCE.** CONSULTANT shall perform all services required pursuant to this Agreement. Services shall be performed in the manner and according to the standards observed by a competent practitioner of the profession in which CONSULTANT is engaged in the geographical area in which CONSULTANT practices his profession. All products which CONSULTANT delivers to CITY pursuant to this Agreement shall be prepared in a workmanlike manner, and conform to the standards of quality normally observed by a person practicing in CONSULTANT's profession. CITY shall be the sole judge as to whether the product of the CONSULTANT is satisfactory.

8) CANCELLATION OF AGREEMENT. This Agreement may be canceled at any time by the CITY at its discretion upon written notification to CONSULTANT. CONSULTANT is entitled to receive full payment for all services performed and all costs incurred up to and including the date of receipt of written notice to cease work on the project. CONSULTANT shall be entitled to no further compensation for work performed after the date of receipt of written notice to cease work. All completed and incomplete products up to the date of receipt of written notice to cease work shall become the property of CITY.

9) PRODUCTS OF CONSULTING. All products of the CONSULTANT provided under this Agreement shall be the property of the CITY.

10) INDEMNIFY AND HOLD HARMLESS.

a) If AGREEMENT is an agreement for design professional services subject to California Civil Code § 2782.8(a) and CONSULTANT is a design professional, as defined in California Civil Code § 2782.8(c)(2), to the fullest extent allowed by law, CONSULTANT shall hold harmless, defend and indemnify the CITY, its officers, agents, employees, and volunteers from and against all claims, damages, losses, and expenses including attorneys' fees arising out of, or pertaining to, or relating to the negligence, recklessness, or willful misconduct of the CONSULTANT, except where caused by the active negligence, sole negligence, or willful misconduct of the CITY.

b) If AGREEMENT is not an agreement for design professional services subject to California Civil Code § 2782.8(a) or CONSULTANT is not a design professional as defined in subsection (a) above, to the fullest extent allowed by law, CONSULTANT shall indemnify, defend, and hold harmless the CITY, its officers, agents, employees and volunteers from all claims, suits, or actions of every name, kind and description, brought forth on account of injuries to or death of any person or damage to property arising from or connected with the willful misconduct, negligent acts, errors or omissions, ultra-hazardous activities, activities giving rise to strict liability, or defects in design by CONSULTANT or any person directly or indirectly employed by or acting as agent for CONSULTANT in the performance of this Agreement, including the concurrent or successive passive negligence of the CITY, its officers, agents, employees or volunteers.

It is understood that the duty of CONSULTANT to indemnify and hold harmless includes the duty to defend as set forth in Section 2778 of the California Civil Code.

Acceptance of insurance certificates and endorsements required under this Agreement does not relieve CONSULTANT from liability under this indemnification and hold harmless clause. This indemnification and hold harmless clause shall apply whether or not such insurance policies are determined to be applicable to any such damages or claims for damages.

CONSULTANT'S responsibility for such defense and indemnity shall survive termination or completion of this agreement for the full period of time allowed by law.

11)PROHIBITED INTERESTS. No employee of the CITY shall have any direct financial interest in this agreement. This agreement shall be voidable at the option of the CITY if this provision is violated.

12)LOCAL EMPLOYMENT POLICY. The CITY desires wherever possible, to hire qualified local residents to work on city projects. Local resident is defined as a person who resides in Solano County. The CITY encourages an active affirmative action program on the part of its contractors, consultants, and developers. When local projects require, subcontractors, contractors, consultants and developers will solicit proposals from qualified local firms where possible.

As a way of responding to the provisions of the Davis-Bacon Act and this program, contractor, consultants, and developers will be asked, to provide no more frequently than monthly, a report which lists the employee's name, job class, hours worked, salary paid, city of residence, and ethnic origin.

13)CONSULTANT NOT A PUBLIC OFFICIAL. CONSULTANT is not a "public official" for purposes of Government Code §§ 87200 et seq. CONSULTANT conducts research and arrives at his or her conclusions, advice, recommendation, or counsel independent of the control and direction of the CITY or any CITY official, other than normal contract monitoring. In addition, CONSULTANT possesses no authority with respect to any CITY decision beyond these conclusions, advice, recommendation, or counsel.

14)EMPLOYMENT DEVELOPMENT DEPARTMENT REPORTING REQUIREMENTS. When the CITY executes an agreement for or makes payment to CONSULTANT in the amount of \$600 (six hundred dollars) or more in any one calendar year, CONSULTANT shall provide the following information to CITY to comply with Employment Development Department (EDD) reporting requirements:

a) Whether CONSULTANT is doing business as a sole proprietorship, partnership, limited liability partnership, corporation, limited liability corporation, non-profit corporation or other form of organization.

b) If CONSULTANT is doing business as a sole proprietorship, CONSULTANT shall provide the full name, address and social security number or federal tax identification number of the sole proprietor.

c) If CONSULTANT is doing business as other than a sole proprietorship, CONSULTANT shall provide CONSULTANT'S federal tax identification number.

EXHIBIT "D"

INSURANCE REQUIREMENTS

CONSULTANT shall procure and maintain for the duration of the contract insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the work hereunder by the CONSULTANT, its agents, representatives, or employees.

1) MINIMUM SCOPE AND LIMITS OF INSURANCE

a) Commercial General Liability coverage (occurrence Form CG 00 01) with minimum limits of \$1,000,000 per occurrence for bodily injury, personal injury, products and completed operations, and property damage. If Commercial General Liability or other form with a general aggregate limit is used, either the general aggregate limit shall apply separately to this project/location or the general aggregate limit shall be twice the required occurrence limit.

b) Automobile Liability coverage (Form CA 00 01 with Code 1 – any auto) with minimum limits of \$1,000,000 per accident for bodily injury and property damage.

c) Workers' Compensation insurance as required by the State of California and Employers' Liability insurance, each in the amount of \$1,000,000 per accident for bodily injury or disease.

2) INDUSTRY SPECIFIC COVERAGES

If checked below, the following insurance is also required.

- ☒ Professional Liability Insurance / Errors and Omissions Liability in the minimum amount of \$1,000,000 per occurrence.
- ☐ Pollution Liability Insurance in the minimum amount of \$1,000,000 per occurrence
- ☐ Garage Keepers Insurance in the minimum amount of \$1,000,000 per occurrence
- ☐ Fidelity / Crime / Dishonesty Bond in the minimum amount of \$_____
- ☐ MCS-90 Endorsement to Business Automobile insurance for transportation of hazardous materials and pollutants
- ☐ Builder's Risk / Course of Construction Insurance in the minimum amount of \$_____.

3) INSURANCE PROVISIONS

a) DEDUCTIBLES AND SELF-INSURED RETENTIONS. Any deductibles or self-insured retentions must be declared to and approved by the CITY. At the option of the CITY, either the insurer shall reduce or eliminate such deductibles or self-insured retentions as respects the CITY, its officers, officials, employees and volunteers; or the CONSULTANT shall procure a bond guaranteeing payment of losses and related investigations, claim administration and defense expenses.

b) The general and automobile liability policies (and if applicable, pollution liability, garage keepers liability and builder's risk policies) are to contain, or be endorsed to contain, the following provisions:

- i) The CITY, its officers, officials, employees and volunteers are to be covered as insureds as respects: liability arising out of work or operations performed by or on behalf of the CONSULTANT; products and completed operations of the CONSULTANT; premises owned, occupied or used by the CONSULTANT; and automobiles owned, leased, hired or borrowed by the CONSULTANT. The coverage shall contain no special limitations on the scope of protection afforded to the CITY, its officers, officials, employees or volunteers.
- ii) For any claims related to this project, the CONSULTANT'S insurance coverage shall be primary insurance as respects the CITY, its officers, officials, employees and volunteers. Any insurance or self-insured maintained by the CITY, its officers, officials, employees or volunteers shall be excess of the CONSULTANT'S insurance and shall not contribute with it.
- iii) Any failure to comply with reporting or other provisions of the policies including breaches of warranties shall not affect coverage provided to the CITY, its officers, officials, employees or volunteers.
- iv) The CONSULTANT'S insurance shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability.
- v) Each insurance policy required by this clause shall be endorsed to state that coverage shall not be suspended, voided, canceled by either party, reduced in coverage or in limits except after thirty (30) days' prior written notice by certified mail, return receipt requested, has been given to the CITY.
- vi) The policy limits of coverage shall be made available to the full limits of the policy. The minimum limits stated above shall not serve to reduce the CONSULTANT'S policy limits of coverage. Therefore, the requirements for coverage and limits shall be (1) the minimum coverage and limits specified in this agreement, or (2) the broader coverage and maximum limits of coverage of any insurance policy or proceeds available to the named insured, whichever is greater.

c) ACCEPTABILITY OF INSURER. Insurance is to be placed with insurers with a current A.M. Best's rating of no less than A:VII, unless otherwise acceptable to the CITY.

d) VERIFICATION OF COVERAGE. CONSULTANT shall furnish the CITY with original endorsements effecting coverage required by this Exhibit D. The endorsements are to be signed by a person authorized by that insurer to bind coverage on its behalf. The endorsements are to be on forms provided by the CITY or on forms equivalent to CG 20 10 11 85 subject to CITY approval. All insurance certificates and endorsements are to be received and approved by the CITY before work commences. At the request of the CITY, CONSULTANT shall provide complete, certified copies of all required insurance policies, including endorsements effecting the coverage required by these specifications.

e) SUB-CONTRACTORS. CONSULTANT shall require all subcontractors to procure and maintain insurance policies subject to the requirements of Exhibit D. Failure of CONSULTANT to verify existence of sub-contractor's insurance shall not relieve CONSULTANT from any claim arising from sub-contractors work on behalf of CONSULTANT.